Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application.

1. (Currently Amended) A method for disrupting target gene expression at the mRNA level in a human cell, wherein the method comprises initiating RNA interference (RNAi) *in vitro* by exposing the human cell to a double stranded RNA (dsRNA) homologous to the target gene, wherein the dsRNA consists essentially of two complementary linearized strands of RNA, the transcription of each is independently controlled to generate paired RNAs of defined length.

2. (Previously Amended) The method of claim 1, wherein the human cell is from a cell line.

3-4 (Previously Cancelled)

5. (Previously Amended) The method of claim 1, wherein the function of the target gene is disrupted.

6. (Previously Cancelled)

7. (Currently Amended) The method of claim 1, wherein the human cell is a melanoma, leukemia, tumor, or transformed cell.

8. (Previously Amended) The method of claim 7, wherein the tumor cell is malignant.

9. (Previously Amended) The method of claim 1, wherein the double stranded RNA is part of a pharmaceutical composition.

10. (Previously Cancelled)

11. (Previously Amended) The method of claim 9, wherein the pharmaceutical composition is used to treat human disease.

12-13 (Previously Cancelled)

14. (Cancelled)

15-16 (Previously Cancelled)

17-20 (Cancelled)

21. (Previously Added) The method of claim 11, wherein the human disease is cancer.

22. (Currently Amended) A method for disrupting target gene expression in vitro at the mRNA level in a human cell, wherein the method comprises providing small interfering RNA guide sequences which are homologous to a portion of the target gene, such that RNAi of the target gene is induced.

23. (Newly Added) The method of claim 22, wherein the method further comprises providing to a population of the human cells an effective amount of KdsRNA to initiate RNA interference, thereby effecting disruption of target gene expression of KitR at the mRNA level.

24. (Newly Added) The method of claim 22, wherein the human cells are melanoma, leukemia, tumor or transformed cells.

25. (Newly Added) The method of claim 24, wherein the cells are malignant.

26. (Newly Added) The method of claim 22, wherein the interfering RNA comprises part of a pharmaceutical formulation.

27. (Newly Added) The method of claim 26, wherein the pharmaceutical composition is used to treat human disease or disorders.